Amendments to Specification:

Please replace the paragraph beginning at page 42, Line 3 with the following paragraph:

The system 530 of Figure 5B is similar to the system 500 of Figure 5A, except a wavelength modulation device 532 is used in place of a wavelength selection device. The system 540 of Figure 5C is similar to the system 500 of Figure 5A, except the wavelength selection device 542 is positioned in the output beam path. The system 550 of Figure 5D is similar to the system 500 of Figure 5C, except a wavelength modulation device ~~532~~ 552 is used in place of a wavelength selection device. The wavelength modulation device operates by modulating the intensity of different wavelengths in different temporal patterns such as different sinusoidal frequencies. The most common examples of such a device are interferometers which can be controlled by changing one or more optical path lengths in the wavelength modulation device 532 itself (e.g., an interferometric system, such as in a Michelson, Fabry-Perot, or Sagnac interferometers). The spectral information may be derived from the resulting signal with a transform analysis like a Fourier transform or Hadamard transform, for example.

Please replace the paragraph beginning at page 43, Line 3 with the following paragraph:

Fig. 5(f) is a diagrammatic representation of a fixed, discrete channel optical system in accordance with a fifth embodiment of the present invention. In this embodiment, the system includes a mirror having spectroscopic apertures 562. That is, the mirror is reflected, except for a plurality of apertures which let the light from the sample pass through in particular spatial portions. Fig. 5(g) is a diagrammatic representation of the aperture mirror of Fig. 5(f) in accordance with one embodiment of the present invention. As shown, the mirror ~~574~~ 572 includes four etched apertures 574. The apertures 574 are etched within a mirror reflective substrate 572. In one implementation, the light which corresponds to each center portion of each target pass through the mirror to separate detectors, *e.g.,* fiber pickoffs to spectrometers 564. The remaining portion of the target image, excluding the central image portions for each target, is reflected by mirror 562 to a camera. Fig. 5(h) is a top view representation of an imaging spectrometer, multiple site field of view example with missing aperture components (that are sent to spectrometers) in accordance with one embodiment of the present invention. As shown, the camera image of the targets contain missing portions 582 which signals are sent to spectrometers, instead of a camera.

Please replace the paragraph beginning at page 74, Line 3 with the following paragraph:

Figure 10 is a diagrammatic top view representation of a system 1000 for obtaining a line image of a plurality of targets 1008a-1008d in accordance with one embodiment of the present invention. As shown, a light source 1002 directs a beam towards cylindrical optics 1004 configured to illuminate a one-dimensional (1D) incident line 1006 of the targets 1008a-1008d. The light source and the incident optics are arranged so that the 1D incident line strikes at least a portion of all of the four targets. For example, the 1D line is incident on a line through the center of the four targets.

Please replace the paragraph beginning at page 79, Line 6 with the following paragraph:

In other combinational target arrangements, the imaging structures are laid out in the center of a symmetrically arranged set of scatterometry targets. Figure 11b is a top view representation of a second combination imaging and scatterometry target embodiment. As shown, scatterometry targets are symmetrically arranged around a central image type target ~~152~~ 1152. In this example, the image type target 1152 is formed from quadrants of line segments, where each quadrant is either in the x or y direction. Suitable image type targets and techniques for determining overlay with same are described in the following U.S. patents and applications: (1) Patent No. 6,462,818, issued 8 October 2002, entitled "OVERLAY ALIGNMENT MARK DESIGN", by Bareket, (2) Patent No. 6,023,338, issued 8 February 2000, entitled "OVERLAY ALIGNMENT MEASUREMENT OF WAFER", by Bareket, (3) Application No. 09/894,987, filed 27 June 2001, entitled "OVERLAY MARKS, METHODS OF OVERLAY MARK DESIGN AND METHODS OF OVERLAY MEASUREMENTS", by Ghinovker et al., and (4) Patent No. 6,486,954, issued 26 November 2002, entitled "OVERLAY ALIGNMENT MEASUREMENT MARK" by Levy et al. These patents and applications are all incorporated herein by reference in their entirety.

Please replace the paragraph beginning at page 81, Line 18 with the following paragraph:

Additionally, imaging or scatterometry metrology may be selected for particular targets based on analyzing the trade-offs between performance versus throughput or wafer real estate. For instance, smaller targets may be used in tighter spaces such as in-chip, while larger targets are used larger spaces such as in the scribe lines or streets located between fields or dies, respectively. In one implantation, larger targets are distributed across the field of the lithography tool in the scribe line, while smaller targets are placed across the field within in the one or more dies. Scatterometry overlay may be used for the larger targets, *e.g.,* in the scribe lines or streets, while imaging overlay is used for the smaller targets, *e.g.,* that are located in-chip or within one or more dies. In one implementation, scatterometry metrology is used for targets within the scribe line (and/or streets), and imaging metrology is used for all other targets at other locations.

Several embodiments for placing targets across the field either in-chip or in the streets or scribe lines are described in detail in co-pending U.S. Provisional Application No. 60/546,546 ~~_______________~~(having Attorney Docket No. KLA1P122X1P2), filed 20 February 2004, entitled APPARATUS AND METHODS FOR DETERMINING OVERLAY AND USES OF SAME, by Mark Ghinovker et al., which application is incorporated herein by reference in its entirety for all purposes. In another implementation, overlay may be determined on two layer and simultaneous type targets as described in this provisional application. In one implementation, scatterometry metrology may be used for simultaneous or single layer targets, while imaging metrology is used for two layer targets, or visa versa.

Please replace the paragraph beginning at page 85, Line 8 with the following paragraph:

The combination system 1160 also includes a stage 1166 for holding the sample thereon. The stage and the optical assemblies move in relation to one another so that the stage can be in a first position under the imaging optical assembly 1162 and in a second position under the scatterometry optical assembly 1164. The stage and/or the optical assemblies 1162 and 1164 may be coupled to a translational motor. Although a single isolation chamber and stage 1166 are shown for system 1160, the imaging and scatterometry assemblies may have their own stage and separate isolation chambers.